

## CLAIMS

### What is Claimed is:

1. An EMI-shielding riser card comprising at least six stacked adjoining layers:

- at least three ground layers;  
at least one power layer; and  
at least two signal layers;

wherein the EMI-shielding riser card is a flat sheet of layered material shaped to fill an opening between two compartments of a computer enclosure, thereby dividing the computer enclosure into an EMI source compartment containing a source of EMI and an unshielded compartment, and wherein at least one of the at least three ground layers is positioned to be interposed between the EMI source compartment and the at least two signal layers, and to cover substantially all of any portion of the at least two signal layers that is connected to any device in the unshielded compartment when the riser card is mounted in the computer enclosure.

2. The EMI-shielding riser card of Claim 1, the riser card is configured for an NLX system.

3. The EMI-shielding riser card of Claim 1, wherein the at least three ground layers are configured to connect to a ground connection of a computer system.

4. The EMI-shielding riser card of Claim 1, wherein the riser card is rectangular.

5. The EMI-shielding riser card of Claim 4, further comprising a through hole for mounting to a frame adjacent to each of four corners of the riser card.

6. The EMI-shielding riser card of Claim 1, further comprising at least one peripheral port socket on a first surface of the riser card configured to face the unshielded compartment

7. The EMI-shielding riser card of Claim 1, further comprising at least one connector on a second surface of the riser card configured to face the EMI source compartment.

8. The EMI-shielding riser card of Claim 6, further comprising at least one connector on a second surface of the riser card configured to face the EMI source compartment.

9. The EMI-shielding riser card of Claim 6, further comprising a plurality of vias through at least one layer of the riser card for connecting at least one signal layer to the at least one peripheral port socket.

10. The EMI-shielding riser card of Claim 7, further comprising a plurality of vias through at least one ground layer for connecting at least one signal layer to the connector.

11. The EMI-shielding riser card of Claim 8, further comprising a plurality of vias through the at least six stacked adjoining layers for connecting the connector to the at least one peripheral port socket.